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AN ***119:170093*** CA
TI Color-variable light-emitting diode utilizing conducting polymer containing fluorescent dye
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SO Jpn. J. Appl. Phys., Part 2 (1993), 32(7A), L921-L924
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DT Journal
LA English
CC 73-11 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)
AB A color-variable light-emitting diode has been realized utilizing conducting polymer, poly(2,5-dioctyloxy-p-phenylene vinylene) (ROPPV-8), mixed with fluorescent dye, tris(8-hydroxyquinolinolato)aluminum (Alq3). The electroluminescence of the diode changes from orange to greenish-yellow in color with increasing applied voltage. On the other hand, a light-emitting diode with the two-layer structure of ROPPV-8 and Alq3 shows only light emission from the ROPPV-8 layer. This difference is discussed in terms of the carrier injection process to Alq3.
ST light emitting diode polymer fluorescent dye; electroluminescent device polymer fluorescent dye
IT Luminescence
Luminescence, electro-
Ultraviolet and visible spectra
(of polymer contg. fluorescent dye)
IT Electroluminescent devices
(org., color variable, using conducting polymer contg. fluorescent dye)
IT 2085-33-8, Tris(8-hydroxyquinolinato)aluminum 50926-11-9, Indium tin oxide 133069-19-9, Poly(2,5-dioctyloxy-p-phenylenevinylene)
RL: USES (Uses)
(in electroluminescent device)